Blast of SEQ ID NO:3 versus human genomic sequence

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MegaBlast:
MEGABLAST 1.2.3-Paracel [2001-11-20]
Reference:
Zheng Zhang, Scott Schwartz, Lukas Wagner, and Webb Miller (2000),
"A greedy algorithm for aligning DNA sequences",
J Comput Biol 2000; 7(1-2):203-14.
Database: Homo_sapiens.latestgp.masked.fa
        44,521 sequences; 200,768,834,160 total letters
Query= seqid3
        (3645 letters)
                                                                   Ε
                                                          Score
                                                          (bits) Value
Sequences producing significant alignments:
                                                            442 - e-121
AC116621.6.101924.177999
                                                            406 e-110
AC116621.6.22858.101182
                                                                e-110
                                                            406
AC116615.3.60396.89763
                                                            389
                                                                e-105
AC084724.3.6664.29537
                                                                2e-87
                                                            331
AC084724.3.127117.217563
                                                                1e-57
                                                            232
AC084724.3.29638.51693
                                                            178
                                                                2e-41
AC116643.2.13772.15264
                                                                4e-39
                                                            170
AC116642.2.30736.38115
>AC116621.6.101924.177999
         Length = 76076
 Score = 442 \text{ bits } (223), \text{ Expect = } e-121
 Identities = 233/236 (98%), Gaps = 1/236 (0%)
 Strand = Plus / Minus
Query: 1985 tttca-agtaagcgagaaatacttcgcagattaaatgaaaatcttaaagctcaagaagat 2043
            Sbjct: 69908 tttcagagtaagcgagaaatacttcgtagattaaatgaaaatcttaaagctcaagaagat 69849
Query: 2044 gaaaaaggaatgcagaatctctctgatacttttgagataaatgttcatgaagatgccaaa 2103
            Sbjct: 69848 gaaaaaggaaagcagaatctctctgatacttttgagataaatgttcatgaagatgccaaa 69789
            gagcatgaaaaagaaaatcagtttcatctgatcgcaagaagtgggaggcaggaggtcaa 2163
Ouery: 2104
            Sbjct: 69788 gagcatgaaaaagaaaaatcagtttcatctgatcgcaagaagtgggaggcaggaggtcaa 69729
Query: 2164 cttgtgattcctctggatgagttaacactagatacatccttctctacaactgaaag 2219
            Sbjct: 69728 cttgtgattcctctggatgagttaacactagatacatccttctctacaactgaaag 69673
```

Score = 357 bits (180), Expect = 3e-95
Identities = 180/180 (100%)
Strand = Plus / Minus

```
agagcctggaaccaatgattctcagcactctaaatgtgatgtagataagtctgtgcaacc 2816
          Sbjct: 17338 agagcctggaaccaatgattctcagcactctaaatgtgatgtagataagtctgtgcaacc 17279
         ggaaccatttttccataaggtggttcattctgaacacttgaacttagtccctcaagttca 2876
         Sbjct: 17278 ggaaccatttttccataaggtggttcattctgaacacttgaacttagtccctcaagttca 17219
Query: 2877 atcagttcagtgttcaccagaagaatcctttgcatttcgatctcactcgcatttaccacc 2936
          Sbjct: 17218 atcagttcagtgttcaccagaagaatcctttgcatttcgatctcactcgcatttaccacc 17159
Score = 303 bits (153), Expect = 4e-79
Identities = 153/153 (100%)
Strand = Plus / Minus
Query: 2219 gacatacagtgggagaagttattaaattaggtcctaatggatctccaagaagagcctggg 2278
          Sbjct: 55945 gacatacagtgggagaagttattaaattaggtcctaatggatctccaagaagagcctggg 55886
Query: 2279 ggaaaagtccgacagattctgttctaaagatacttggagaagctgaactacaacttcaga 2338
          Sbjct: 55885 ggaaaagtccgacagattctgttctaaagatacttggagaagctgaactacaacttcaga 55826
Query: 2339 cagaactattagaaaatacaactattagaagtg 2371
          Sbjct: 55825 cagaactattagaaaatacaactattagaagtg 55793
 Score = 264 bits (133), Expect = 4e-67
 Identities = 133/133 (100%)
 Strand = Plus / Minus
Query: 1792 ttggtggctaaaggagttaagagttctgatgtttctccacctttgggacagcatgaaaca 1851
          Sbjct: 72084 ttggtggctaaaggagttaagagttctgatgtttctccacctttgggacagcatgaaaca 72025
          ggtggctctccatcaaagcaacagatgagatctgttatttctgtáacttcagctttgaaa 1911
Ouery: 1852
          Sbjct: 72024 ggtggctctccatcaaagcaacagatgagatctgttatttctgtaacttcagctttgaaa 71965
Query: 1912 gaagttggcgtgg 1924
          Sbjct: 71964 gaagttggcgtgg 71952
```

Identities = 125/125 (100%)
Strand = Plus / Minus

Query: 2607 gagcttgccatgcactattactgatgtgtggattagtgaggaaaaagaaacaaaggaaac 2666

Query: 2667 tcagt 2671

Sbjct: 26099 tcagt 26095

Score = 246 bits (124), Expect = 8e-62

Identities = 124/124 (100%)

Strand = Plus / Minus

Query: 2425 gtacaatgtatttcacatgaaataaacccatcagctattgttgattctcctgttgagaca 2484

Sbjct: 30756 gtacaatgtatttcacatgaaataaacccatcagctattgttgattctcctgttgagaca 30697

Query: 2545 gaag 2548

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Sbjct: 30636 gaag 30633

Score = 176 bits (89), Expect = 6e-41

Identities = 89/89 (100%)

Strand = Plus / Minus

Query: 2670 gtcggcagataggatcaccattcaggaaaatgaagtttctgaagatggagtctcgagtac 2729

Sbjct: 18770 gtcggcagataggatcaccattcaggaaaatgaagtttctgaagatggagtctcgagtac 18711

Query: 2730 tgtggaccaacttagtgacattcatatag 2758

Sbjct: 18710 tgtggaccaacttagtgacattcatatag 18682

Score = 135 bits (68), Expect = 2e-28 Identities = 72/73 (98%), Gaps = 1/73 (1%)

Strand = Plus / Minus

Query: 1923 ggacagtagtttaactgatacccgggaaacttcagaagagatgcaaaagaccaacaatgc 1982 Sbjct: 70048 ggacagtagtttaactgatacccgggaaacttcagaagagatgcaaaagaccaacaatgc 69989 Query: 1983 tatttcaagtaag 1995 Sbjct: 69988 tatttca-gtaag 69977 Score = 115 bits (58), Expect = 2e-22 Identities = 58/58 (100%) Strand = Plus / Minus Query: 2949 caagaattccttgctgattggactttcaactggtctgtttgatgcaaacaacccaaag 3006 Sbjct: 17146 caagaattccttgctgattggactttcaactggtctgtttgatgcaaacaacccaaag 17089 Score = 91.7 bits (46), Expect = 3e-15 Identities = 46/46 (100%) Strand = Plus / Minus gagatttctcccgaaggggaaaagtacaaacccttaattactggag 2416 Query: 2371 Sbjct: 30810 gagatttctcccgaaggggaaaagtacaaacccttaattactggag 30765 >AC116621.6.22858.101182 Length = 78325Score = 406 bits (205), Expect = e-110 Identities = 208/209 (99%) Strand = Plus / Minus Query: 3159 tgtgtttgaagaaactgacacagatttacaagagctgcaggcctcgatggaacagttact 3218 Sbjct: 74191 tgtgtttgaagaaactgacacagatttacaagagctgcaggcctcgatggaacagttact 74132 Query: 3219 Query: 3279 tgtggagccaactgcaaatgggacagatgtggcagatgaagatgacaatcccagtagtga 3338 Sbjct: 74071 tgtggagccaactgcaaatgggacagatgtggcagatgaagatgacaatcccagcagtga 74012 Query: 3339 aagtgccctgaacgaagaatggcactcag 3367

Sbjct: 74011 aagtgccctgaacgaagaatggcactcag 73983

```
Score = 268 bits (135), Expect = 2e-68
Identities = 135/135 (100%)
Strand = Plus / Minus
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aggctattcatgaagatgaagatgaaaatattgaaatttgttcaaaaatagttcaaaata 3556 TÜHLEHLI ÜLÜLÜLÜN BERHALIK BERHALIK BERLA Query: 3497

Sbjct: 72690 aggctattcatgaagatgaagatgaaaatattgaaatttgttcaaaaatagttcaaaaata 72631

Query: 3557 ttttgggaaatgaacatcagcatctttatgccaagattcttcatttagtcatggcagatg 3616

Sbjct: 72630 ttttgggaaatgaacatcagcatctttatgccaagattcttcatttagtcatggcagatg 72571

gagcctaccaagaag 3631 Query: 3617

Sbjct: 72570 gagcctaccaagaag 72556

Score = 266 bits (134), Expect = 9e-68 Identities = 134/134 (100%) Strand = Plus / Minus

Query: 3366 agataacagtgatggtgaaattgctagtgaatgtgaatgcgatagtgtctttaaccattt 3425

Sbjct: 72984 agataacagtgatggtgaaattgctagtgaatgtgaatgcgatagtgtctttaaccattt 72925

Query: 3426 agaggaactgagacttcatctggagcaggaaatgggctttgaaaaattctttgaggttta 3485

Sbjct: 72924 agaggaactgagacttcatctggagcaggaaatgggctttgaaaaattctttgaggttta 72865

tgagaaaataaagg 3499 Query: 3486

1111111111111111

Sbjct: 72864 tgagaaaataaagg 72851

>AC116615.3.60396.89763 Length = 29368

Score = 406 bits (205), Expect = e-110 Identities = 208/209 (99%) Strand = Plus / Minus

Query: 3159 tgtgtttgaagaaactgacacagatttacaagagctgcaggcctcgatggaacagttact 3218 ññañahanimahananimahanimahana

Sbjct: 21838 tgtgtttgaagaaactgacacagatttacaagagctgcaggcctcgatggaacagttact 21779

Query: 3219 tagggaacaacctggtgaagaatacagtgaagaagaagaagatcagtcttgaagaacagtga 3278 HÄÄMMAHÄÄÄÄÄMMÄÄMÄMÄÄÄMÄÄMÄÄÄÄÄÄ

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Query: 3279 tgtggagccaactgcaaatgggacagatgtggcagatgaagatgacaatcccagtagtga 3338
          Sbjct: 21718 tgtggagccaactgcaaatgggacagatgtggcagatgaagatgacaatcccagcagtga 21659
Query: 3339 aagtgccctgaacgaagaatggcactcag 3367
          Sbjct: 21658 aagtgccctgaacgaagaatggcactcag 21630
Score = 297 bits (150), Expect = 3e-77
Identities = 153/154 (99%)
 Strand = Plus / Minus
Query: 3005 agatgttaaggacatgttcacttccagatctctcaaagctgttcagaacccttatggatg 3064
          Sbjct: 26727 agatgttaaggacatgttcacttccagatctctcaaagctgttcagaacccttatggatg 26668
Query: 3065 ttcccaccgtaggagatgttcgtcaagacaatcttgaaatagatgaaattaaagatgaaa 3124
          Sbjct: 26667 ttcccaccgtaggagatgttcgtcaagacaatcttgaaatagatgaaattgaagatgaaa 26608
Query: 3125 acattaaagaaggaccttctgattctgaagacat 3158
          Sbjct: 26607 acattaaagaaggacettetgattetgaagacat 26574
 Score = 268 bits (135), Expect = 2e-68
 Identities = 135/135 (100%)
 Strand = Plus / Minus
Query: 3497 aggctattcatgaagatgaagatgaaaatattgaaatttgttcaaaaatagttcaaaata 3556
          Sbjct: 20337 aggctattcatgaagatgaagatgaaaatattgaaatttgttcaaaaatagttcaaaata 20278
Query: 3557 ttttgggaaatgaacatcagcatctttatgccaagattcttcatttagtcatggcagatg 3616
          Sbjct: 20277 ttttgggaaatgaacatcagcatctttatgccaagattcttcatttagtcatggcagatg 20218
Query: 3617 gagcctaccaagaag 3631
           1111111111111111
Sbjct: 20217 gagcctaccaagaag 20203
 Score = 266 bits (134), Expect = 9e-68
 Identities = 134/134 (100%)
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Query: 3366 agataacagtgatggtgaaattgctagtgaatgtgaatgcgatagtgtctttaaccattt 3425

Strand = Plus / Minus

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Sbjct: 20631 agataacagtgatggtgaaattgctagtgaatgtgaatgcgatagtgtctttaaccattt 20572
          agaggaactgagacttcatctggagcaggaaatgggctttgaaaaattctttgaggttta 3485
Query: 3426
          Sbjct: 20571 agaggaactgagacttcatctggagcaggaaatgggctttgaaaaattctttgaggttta 20512
Query: 3486 tgagaaaataaagg 3499
           Sbjct: 20511 tgagaaaataaagg 20498
>AC084724.3.6664.29537
        Length = 22874
 Score = 389 \text{ bits (196), Expect} = e-105
 Identities = 200/201 (99%), Gaps = 1/201 (0%)
 Strand = Plus / Plus
          tttgaagctggcagtatgaaaaacctggtactgaagataatatctggatcttttccacct 666
Query: 607
          Sbjct: 7611 tttgaagctggcagtatgaaaaacctggtactgaagataatatctggatcttttccacct 7670
          gtgtctttgcattattcctatgatctccgcagtttggtgtctcagttatttaaaagaaat 726
Query: 667
          Sbjct: 7671 gtgtctttgcattattcctatgatctccgcagtttggtgtctcagttatttaaaagaaat 7730
          cctagggatagaccatcagtcaactccatattggagaaaggttttatagccaaacgcatt 786
 Query: 727
           Sbjct: 7731 cctagggatagaccatcagtcaactccatattggagaaaggttttatagccaaacg-att 7789
 Query: 787 gaaaagtttctctctctcag 807
           Sbjct: 7790 gaaaagtttctctctcctcag 7810
  Score = 307 \text{ bits (155), Expect} = 3e-80
  Identities = 155/155 (100%)
  Strand = Plus / Plus
            agctaaaagaccagcttcaggacaaaactcgatttctgttatgcctgctcagaaaattac 926
            Query: 867
 Sbjct: 16079 agctaaaagaccagcttcaggacaaaactcgatttctgttatgcctgctcagaaaattac 16138
            aaagcctgccgctaaatatggaatacctttagcatataagaaatatggagataaaaaatt 986
            miminimumilmumimumimumiliimum
 Ouery: 927
 Sbjct: 16139 aaagcctgccgctaaatatggaatacctttagcatataagaaatatggagataaaaaatt 16198
            acacgaaaagaaaccactgcaaaaacataaacagg 1021
  Query: 987
            Sbjct: 16199 acacgaaaagaaaccactgcaaaaacataaacagg 16233
```

```
Score = 178 bits (90), Expect = 2e-41
Identities = 90/90 (100%)
Strand = Plus / Plus
```

Query: 462 tagtactgtagagctggctcgaacttgcatagggaccccatactacttgtcacctgaaat 521

njanjanjajanjanjanjanjanjanjanjanjanja Sbjct: 4422 tagtactgtagagctggctcgaacttgcatagggaccccatactacttgtcacctgaaat 4481

Query: 522 ctgtgaaaacaaaccttacaataataaaag 551

Sbjct: 4482 ctgtgaaaacaaaccttacaataataaaag 4511

Score = 170 bits (86), Expect = 4e-39 Identities = 86/86 (100%) Strand = Plus / Plus

Query: 311 agattttggactggtttgtacagatatgtttggccctgaaacatgtacatgatagaaaaa 370

Sbjct: 2349 agattttggactggtttgtacagatatgtttggccctgaaacatgtacatgatagaaaaa 2408

Query: 371 ttcttcatcgagacattaaatctcag 396 11111111111111111111111111111111111

Sbjct: 2409 ttcttcatcgagacattaaatctcag 2434

Score = 141 bits (71), Expect = 4e-30 Identities = 71/71 (100%) Strand = Plus / Plus

Query: 394 cagaacatatttttaactaaagatggaacagtacaacttggagattttggaattgctaga 453

Sbjct: 3643 cagaacatattttaactaaagatggaacagtacaacttggagattttggaattgctaga 3702

Query: 454 gttcttaatag 464

4111111111 Sbjct: 3703 gttcttaatag 3713

Score = 133 bits (67), Expect = 9e-28 Identities = 70/71 (98%) Strand = Plus / Plus

ctcagcttattgcagaagaattttgtctaaaaacattttcgaagtttggatcacagccta 862 Ouery: 803

Sbjct: 12253 ctcagcttattgcagaagaattttgtctaaaaacattttcgaagtttggatcacagccta 12312

taccagctaaa 873 Query: 863

111111 111

Sbjct: 12313 taccaggtaaa 12323

Score = 113 bits (57), Expect = 8e-22 Identities = 57/57 (100%) Strand = Plus / Plus

Query: 550 agtgacatttgggctctggggtgtgtcctttatgagctgtgtacacttaaacatgct 606

Sbjct: 5545 agtgacatttgggctctggggtgtgtcctttatgagctgtgtacacttaaacatgct 5601

>AC084724.3.127117.217563 Length = 90447

Score = 331 bits (167), Expect = 2e-87

Identities = 167/167 (100%)

Strand = Plus / Plus

Query: 1265 aggctccttttctgggcagtggagggactatagctccatcatctttttcttctcgaggac 1324

Sbjct: 13121 aggctccttttctgggcagtggagggactatagctccatcatcttttcttctcgaggac 13180

Query: 1325 agtatgaacattaccatgccatttttgaccaaatgcagcaacaaagagcagaagataatg 1384

Sbjct: 13181 agtatgaacattaccatgccatttttgaccaaatgcagcagcagaagataatg 13240

Query: 1385 aagctaaatggaaaagagaaatatatggtcgaggtcttccagaaagg 1431

Sbjct: 13241 aagctaaatggaaaagagaaatatatggtcgaggtcttccagaaagg 13287

Score = 264 bits (133), Expect = 4e-67

Identities = 133/133 (100%)

Strand = Plus / Plus

Query: 1792 ttggtggctaaaggagttaagagttctgatgtttctccacctttgggacagcatgaaaca 1851

Sbjct: 89675 ttggtggctaaaggagttaagagttctgatgtttctccacctttgggacagcatgaaaca 89734

ggtggctctccatcaaagcaacagatgagatctgttatttctgtaacttcagctttgaaa 1911 Query: 1852

Sbjct: 89735 ggtggctctccatcaaagcaacagatgagatctgttatttctgtaacttcagctttgaaa 89794

Query: 1912 gaagttggcgtgg 1924

11111111111111

Sbjct: 89795 gaagttggcgtgg 89807

```
Score = 212 bits (107), Expect = 1e-51
Identities = 107/107 (100%)
Strand = Plus / Plus
Query: 1429 aggcaaaaagggcagctagctgtagaaagagctaaacaagtagaagagttcctgcagcga 1488
          Sbjct: 31300 aggcaaaaagggcagctagctgtagaaagagctaaacaagtagaagagttcctgcagcga 31359
Query: 1489 aaacgggaagctatgcagaataaagctcgagccgaaggacatatggt 1535
          Sbjct: 31360 aaacgggaagctatgcagaataaagctcgagccgaaggacatatggt 31406
 Score = 168 bits (85), Expect = 2e-38
 Identities = 85/85 (100%)
 Strand = Plus / Plus
Query: 1533 ggtttatctggcaagactgaggcaaataagactacagaatttcaatgagcgccaacagat 1592
          Sbjct: 60881 ggtttatctggcaagactgaggcaaataagactacagaatttcaatgagcgccaacagat 60940
Query: 1593 taaagccaaacttcgtggtgaaaag 1617
           Sbjct: 60941 taaagccaaacttcgtggtgaaaag 60965
 Score = 153 bits (77), Expect = 9e-34
 Identities = 77/77 (100%)
 Strand = Plus / Plus
 Query: 1191 gttggaaagaataaatagggccagggaacaaggatggagaaatgtgctaagtgctggtgg 1250
          Sbjct: 7663 gttggaaagaataaatagggccagggaacaaggatggagaaatgtgctaagtgctggtgg 7722
 Query: 1251 aagtggtgaagtaaagg 1267
          Sbjct: 7723 aagtggtgaagtaaagg 7739
  Score = 149 bits (75), Expect = 1e-32
  Identities = 75/75 (100%)
  Strand = Plus / Plus
 Query: 1694 aggcccatgcaaatgcacgtgctgctgtactaaaagaacaactagaacgaaagagaaagg 1753
           Sbjct: 62079 aggcccatgcaaatgcacgtgctgctgtactaaaagaacaactagaacgaaagagaaagg 62138
```

Query: 1754 aggcttatgagagag 1768

Sbjct: 62139 aggcttatgagagag 62153

Score = 127 bits (64), Expect = 5e-26 Identities = 64/64 (100%) Strand = Plus / Plus

Sbjct: 7019 caggcccatcaaactccagagaagagtgaatactggagaagaagagagaaatatct 7078

Query: 1078 gagg 1081 1111

Sbjct: 7079 gagg 7082

Score = 123 bits (62), Expect = 8e-25

Identities = 62/62 (100%)

Strand = Plus / Plus

Query: 1079 aggaagcagcaagaaagagaaggctggaatttattgaaaaagaaaagaaacaaaaggatc 1138

Sbjct: 7325 aggaagcagcaagaaagagaaggctggaatttattgaaaaagaaaagaaacaaaaggatc 7384

Query: 1139 ag 1140

Sbjct: 7385 ag 7386

Score = 117 bits (59), Expect = 5e-23

Identities = 59/59 (100%)

Strand = Plus / Plus

Query: 1616 agaaagaagctaatcattctgaaggacaagaaggaagtgaagaggctgacatgaggcgc 1674

Sbjct: 61419 agaaagaagctaatcattctgaaggacaagaaggaagtgaagaggctgacatgaggcgc 61477

Score = 107 bits (54), Expect = 5e-20

Identities = 54/54 (100%)

Strand = Plus / Plus

Query: 1138 cagattattagtttaatgaaggctgaacaaatgaaaaggcaagaaaaggaaagg 1191

Sbjct: 7478 cagattattagtttaatgaaggctgaacaaatgaaaaggcaagaaaaggaaagg 7531

>AC084724.3.29638.51693 Length = 22056

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Score = 232 bits (117), Expect = 1e-57
Identities = 117/117 (100%)
Strand = Plus / Plus
```

Score = 200 bits (101), Expect = 4e-48 Identities = 104/105 (99%) Strand = Plus / Plus

Score = 192 bits (97), Expect = 1e-45

Score = 192 bits (9/), Expect = 1e-4: Identities = 97/97 (100%) Strand = Plus / Plus

>AC116643.2.13772.15264 Length = 1493

Score = 178 bits (90), Expect = 2e-41 Identities = 90/90 (100%)
Strand = Plus / Minus

 >AC116642.2.30736.38115 Length = 7380

Score = 170 bits (86), Expect = 4e-39
Identities = 86/86 (100%)
Strand = Plus / Minus

Score = 95.6 bits (48), Expect = 2e-16 Identities = 63/68 (92%) Strand = Plus / Minus

Query: 457 cttaatag 464 ||||||| Sbjct: 621 cttaatag 614